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### Remarks

**Examiner's objections:**

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP § 602.01 and 602.02.

The oath or declaration is defective because: The title of the invention in the declaration is not the same as the title of the invention given on the first page of the specification. In addition, the declaration fails to claim priority to PCT/EPO3/09702 under 35 USC 120.

**Applicant's response**

Applicant herein files a new declaration in compliance with 37 CFR 1.67(a) in order to overcome the rejection.

**Rejection under 35 U.S.C. 112**

3. Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 2 are indefinite since the claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For example, on line 4 of claim 1 and line 2 of claim 2, the phrase "characterized in that" is not normally used in U.S. claim terminology. Claim 1 should be rewritten in the format of a preamble followed by a transitional phrase such as "comprising" or "consisting of", and then followed by the specific steps of the method. On line 1 of claim 1, the full meanings for the abbreviations "TOD" and "COD" should

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be recited. On line 6 of claim 1, the phrase "the upper region" lacks antecedent basis. On line 2 of claim 2, the phrase "the lower end" lacks antecedent basis.

**Applicants response**

Applicant herein amends the claims to be fully compliant with U.S. practice. Therefore, applicant believes the claim amendments overcome the Examiner's rejection.

**Merit Rejection under 35 U.S.C. 103(a)**

7. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1,439,469 in view of Arts et al (EP 1,055,927).

**Examiner's rejection**

GB 1,439,469 teaches of a method for the pyrolytic analysis of aqueous liquids in order to determine the total oxygen demand (TOD) of the liquids. The method comprises the steps of injecting into a combustion furnace a sample of an aqueous liquid, such as sewage waste water, together with a carrier gas, and heating the sample in the furnace to a temperature from 1000 to 1200°C in the absence of a catalyst. Total oxygen demand is measured by determining the decrease in free oxygen content of the carrier gas during combustion of the sample, and comparing the concentration of free oxygen in the carrier gas both before and after the combustion process. In contrast to conventional furnaces, the combustion furnace taught by the GB patent works in the absence of a catalyst. The high temperature range at which the sample is combusted in the furnace (i.e. 1000-1200°C) ensures that all of the hydrocarbon compounds are completely burnt to form carbon dioxide. See lines 84-90 on page 1, lines 1-26 and 117-122 on page 2, and lines 20-37 on page 3 of GB 1,439,469. The GB patent fails to teach that the combustion chamber is vertically oriented, and that salts in the aqueous sample are removed at the lower end of the combustion chamber.

Arts et al (EP 1, 055,927) teach of a method and device for the decomposition of an aqueous liquid sample in order to determine the total content of organic carbon (TOC)

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therein. The method comprises the steps of passing a sample of aqueous waste water into a combustion chamber that is vertically oriented, and heating the sample to a temperature between 1000 and 1200°C without the presence of a catalyst. Arts et al also teach that any salt components in the sample are removed at the lower end of the vertically oriented combustion chamber. See the abstract, English language translation and Figure 1 of Arts et al.

Based upon a combination of GB 1,439,469 and Arts et al, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to vertically orient the combustion chamber taught by GB 1,439,469 since Arts et al teach that such a configuration is normally used for the combustion of an aqueous waste water sample, and facilitates the passage of the products of combustion to a detector. It also would have been obvious to one of ordinary skill in the art to remove any salts in the aqueous sample combusted using the method and apparatus taught by GB 1,439,469 at the lower end of the combustion chamber since Arts et al. teach that it is advantageous to remove contaminating salts in a combusted aqueous waste water sample so as to achieve accurate detection results.

#### **Applicant's response**

The present application is a process of determining the oxygen demand, TOD, of an aqueous solution, whereas EP 1,055,927 teaches a method for determining the total content of organic carbon, TOC, in such solution. Applicant argues that the one of ordinary skill in the art clearly distinguishes between both methods and would not, without any additional incentive, consider using a method for determining organic carbon as a method for determining TOD. There is no motivation in either reference to perform TOD in a vertical chamber.

The EP 1, 055,927 reference teaches passing of the sample through two heating zones having different temperatures, for determining the nitrogen content of the sample at the same time. Further applicant argues that the solution in a horizontal chamber of GB 1,439,469 must pass through a heating zone several times or "repeatedly" to combust the

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solution (page 1, line 84 to page 2, line 3). Therefore, the heating process of GB 1,439,469 could not be performed in a vertical chamber, as claimed.

Applicant believes claims 1 and 2, as amended, are easily patentable over the art presented by the Examiner.

### Summary

As all of the claims standing for examination have been shown to be patentable over the art of record, applicant respectfully requests reconsideration, and that the present case be passed quickly to issue. If there are any time extensions needed beyond any extension specifically requested with this response, such extension of time is hereby requested. If there are any fees due beyond any fees paid with this amendment, authorization is given to deduct such fees from deposit account 50-0534.

Respectfully Submitted,  
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